State University System
Florida Board of Governors
2020-2021 Legislative Budget Request Instructions
Forms I and II

The main objective of Form I and Form II is to align budget issues and dollar values with the goals and objectives of the strategic priorities and the 2019 University Accountability Plan established by each university.

For FY 2020-2021, each university should submit one Form I and Form II for each university-unique budget issue and/or any system-wide issue identified as a critical system-wide need. Any issues unique to a branch campus or a special unit (e.g., IFAS Workload Initiative) should not be rolled into the main campus request, but reflected separately by use of the forms provided.

For system-wide issues, consideration will be given to issues that allow for greater efficiencies through shared system resources or identified as a system-wide need. If requesting funds as such, please list all university participants of the initiative and check the box "Shared Services/System-Wide Issue".

For unique issues identified by a university, please check the box "Unique Issue for FY 2020-2021". The date of your university board of trustees' approval for the LBR issue <u>must</u> be included on the Form I.

Please keep in mind that all issues submitted for consideration by the Board should align with the goals and objectives of the strategic priorities and accountability plan established by each university.

University(s):	
Issue Title:	Engineering Program of Distinction
Date Issue Approved by University Board of Trustees:	May 22, 2019
Recurring Funds Requested:	$8,500,000
Non-Recurring Funds Requested:	
Total Funds Requested:	$8,500,000
Please check the issue type below:	
Shared Services/System-Wide Issue for Fiscal Year 2020-2021	☐
Unique Issue for Fiscal Year 2020-2021	☒

I. **Description –** *1. Describe the service or program to be provided and how this issue aligns with the goals and objectives of the strategic priorities and the 2019 University Accountability Plan established by your institution (include whether this is a new or expanded service/program). If expanded, what has been accomplished with the current service/program? 2. Describe any projected impact on academic programs, student enrollments, and student services.*

II. **Return on Investment -** *Describe the outcome(s) anticipated, dashboard indicator(s) to be improved, or return on investment. <u>Be specific.</u> For example, if this issue focuses on improving retention rates, indicate the current retention rate and the expected increase in the retention rate. Similarly, if the issue focuses on expanding access to academic programs or student services, indicate the current and expected outcomes.*

III. **Facilities** *(If this issue requires an expansion or construction of a facility, please complete the following table.):*

	Facility Project Title	Fiscal Year	Amount Requested	Priority Number
1.				

2.				

I. Description

The Florida Chamber 2030, Florida Council of 100 Project Sunrise and the regional Economic Development Councils in general agree that strong investments in a talented core STEM (engineering, mathematical and physical sciences) workforce are necessary to continue to grow the high-wage, high-tech economy. The dependency on STEM for industries like aerospace are obvious, but others are less so. For instance, the National Institutes of Health states that some of the biggest gains in healthcare will come not from the life sciences, but from engineering, computer science, and data analysis as applied to health care problems. The finance and insurance industry employ mathematicians and data scientists to make better decisions, as does the logistics industry. Information sciences, driven by Artificial Intelligence (AI), Virtual Reality (VR) and the continued sophistication of the tools of the information age, are pervasive throughout many of the high-tech industries and are critical to growing industry sectors like Autonomous Vehicles, simulation and defense. But as Project Sunrise pointed out, 80,000 high skill jobs in STEM are left unfilled each month, and Florida is not producing enough STEM graduates, ranking only 38th in the nation for STEM degree production.

Florida Poly was created to meet this need by providing a high-skilled, high-wage workforce in Florida. Our graduates are in high-demand, low supply fields and are getting good paying jobs and graduating with minimal debt. Poly is the only 100% STEM institution in the State University System and has met every legislative mandate it was given since opening in 2014. We recently received professional accreditation through ABET for our strong engineering programs and offer a high-touch, small classroom experience with applied learning projects. This model becomes increasingly important as 67% of high school graduates in Florida interested in an engineering education are looking at universities outside the state. In many cases, these students are not interested in a comprehensive university experience, but in a smaller setting with a strong work-ethic culture built around competitions, hands-on problem solving and undergraduate research and work experiences.

The vision for the university is to be an upper-tier engineering school for the state of Florida, and we have made great progress towards that vision in just five years. As a young university, we are already attracting highly distinguished students from across the state, and we have built a strong curriculum around nine engineering and related programs. We built strong relationships with over 200 technology companies and are providing them with a talented workforce. This Legislative Budget Request provides a roadmap and funding request for Florida Poly to become an Engineering University of Distinction and to start the climb to being a top 15 engineering school without a doctorate degree program. To accomplish this we will need to focus on growing our students, faculty, curriculum and support services.

1. Having a highly distinguished student body is an important step in becoming an Engineering University of Distinction. This effort will provide funding for additional scholarships to help attract and retain the most talented high school graduates interested in STEM. Our goal is to have a student body with average entering test scores comparable with the top-tier universities in the United States.

As part of this effort, we will also grow the student body to over 2000 to help fill workforce gaps, and we will graduate over 400 engineers per year by 2026.

2. To attract these students, we must have programs of distinction with world-class faculty. The table that follows shows the funding needed to build a minimum of two new engineering programs that support Florida industry. These new programs will be in emerging fields as determined by market analyses in each program area before bringing them to the BOG for approval.

3. Florida Poly will hire an additional 25 faculty in existing and new programs. With a new Applied Research Center and a growing faculty body, we will strengthen our focus on applied research and strong industry connections in all programs.

4. Finally, we will enhance student services around retention and 4-year graduation rates, which are troublesome metrics for engineering schools. We will continue to grow first and second year student services focused on retention and success. In addition, we will grow our career services and internships, and we will investigate adding co-op programs modeled after some of the more successful universities. Florida Poly will continue to grow the capstone projects motivated by Florida industries and our entrepreneurship programs. Project Sunrise highlighted startups as an opportunity, and we will continue to focus on growing and keeping our graduates in Florida to work with small and medium sized businesses that are essential to a strong economy.

Below is the detailed spending plan that builds each initiative over a five-year period:

	2020-21	2021-22	2022-23	2023-24	2024-25
Scholarships:	$2.0	$2.0	$2.0	$2.0	$2.0
Programs:	$0.0	$1.0	$1.5	$1.5	$1.5
Faculty:	$0.0	$1.0	$2.0	$3.0	$3.0
Services:	$1.0	$1.5	$2.0	$2.0	$2.0
TOTALS:	**$3.0**	**$5.5**	**$7.5**	**$8.5**	**$8.5**

These expenditures support the following Florida Poly strategic plan goals.

Goal 1: Enroll a high quality and diverse incoming class.
Goal 2: Grow a faculty body committed to excellence.
Goal 4: Grow the number of academic programs in strategic disciplines.
Goal 6: Help students achieve academic goals.
Goal 7: Build essential skills in communications, leadership, design and business.
Goal 8: Embed projects in a sustainable manner to enhance professional development.
Goal 9: Support students through work experience programs and career opportunities.

Florida Poly graduates carry low debt loads, earn starting salaries averaging over $50,000 per year and are prepared to be lifetime employable. But we cannot rest on our achievements thus far. We need the funds to move Florida's 100% STEM university to the next level of excellence as an Engineering University of Distinction. We believe our past success makes us worthy of investment for the future.

II. Return on Investment

A recent Economic Impact study completed by Dr. Rick Harper found that the current annual impact of Florida Polytechnic on "the Florida economy is calculated to be more than $161 million in gross domestic product at the local and state level, $98 million in labor income and almost $290 million in overall sales, along with 2,350 jobs." Growing the university to a student body of 2000 should increase the GDP annually by $23.5 million due to university operations, capital expenditures and student spending alone. Increasing the graduates to 400 will have significantly more impact since most of the $161 million annual increase in GDP comes from Present Value lifetime earnings from these high-paying fields.

With the first year focused on increasing scholarships and student services the metrics that demonstrate a year-one accomplishment are:

1. Four-year graduation rates
   a. Current: 37%   2024: 50%
2. Academic Progress Rate
   a. Current: 76%   2024: 90%
3. Freshman in top 10% of high school class
   a. Current: 22%   2024: 32%

Additional metrics that will demonstrate ROI to the state over time include:

1. Percent Bachelor's graduates enrolled or employed
   a. Current: N/A   2024: 85%
2. Median wages of bachelor's graduates employed full-time
   a. Current: N/A   2024: $65,000
3. Headcount enrollment by level
   a. Current: 1334   2024: 2000
4. Bachelor's degrees awarded
   a. Current: 197   2024: 400

These metrics will be used annually to demonstrate how the program has improved over time.

Lastly, our Public University National Ranking will demonstrate that Florida Poly has become an Engineering University of Distinction. Currently we are not in the US News World & Report rankings but hope to enter next year.

2020-2021 Legislative Budget Request
Education and General
Position and Fiscal Summary
Operating Budget Form II
(to be completed for each issue)

University:	**Florida Polytechnic University**		
Issue Title:	**FPU University of Distinction**		

	RECURRING	NON-RECURRING	TOTAL
Positions			
Faculty	9.00	0.00	9.00
Other (A&P/USPS)	6.00	0.00	6.00
Total	15.00	0.00	15.00
Salary Rate (for all positions noted above)			
Faculty	$220,000	$0	$220,000
Other (A&P/USPS)	$480,000	$0	$480,000
Total	$700,000	$0	$700,000
Salaries and Benefits	$700,000	$0	$700,000
Other Personal Services	$0	$0	$0
Expenses	$150,000	$0	$150,000
Operating Capital Outlay	$0	$0	$0
Electronic Data Processing	$0	$0	$0
Special Category (Specific)	$0	$0	$0
Consultants	$150,000	$0	$150,000
Scholarships	$2,000,000	$0	$2,000,000
	$0	$0	$0
Total All Categories	$3,000,000	$0	$3,000,000